RESEARCH STUDY





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We are greatly appreciative of the participants who took the time to respond to the online survey and participate in the qualitative interviews.

This research was conducted in partnership with:





All procedures performed in this study were in accordance with the ethical standards of the Seneca Research Ethics board and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

Informed consent was obtained from all individual participants involved in this study.

Contents



Age Disability

5. WORK EXPERIENCES

|4

lĥ

Years in the Sector

Career Stage

Income from Work

in the Sector

Current Place of Occupation

Primary Area of Expertise

Primary Department

Primary Role

Typical Project Budget

Leadership & Decision-Making

6. CAREER PATHWAYS & ACCESS

Sector fragmentation complicates navigation and access

The sector is communitybased and community-driven

Existing supports may not reflect the needs of all sector professionals working in the sector

Funding supports large studios while threatening the sustainability of small studios

Intense competition creates divisiveness and distrust

7. SKILL DEVELOPMENT 25

Self-development is an expectation

Formal education is useful, but insufficient

The 'lack of talent' narrative needs specificity

8. EXPERIENCES OF UNDERREPRESENTED SECTOR PROFESSIONALS 29

Experiences of discrimination were reported more commonly in large / AAA companies

There is a significant lack of sector-level support for underrepresented sector professionals

9. OPPORTUNITIES & JO CONSIDERATIONS

Commit to funding practices that support small studios and build sustainability

Identify opportunities for sector decision-makers to collaborate toward shared goals that promote access

Bridge the gap between training/education and the workforce

Develop and implement diversity, equity and inclusion plans & supporting tools

Commit to regular, equitable data collection

Research Study: Understanding Toronto's Creative Technologies Sector

Terminology

AAA/Triple A Studio

High-budget, high-profile studios that often have more than 20 employees.

Association

An organization founded and funded by business operating in the creative tech sector (e.g., Interactive Ontario).

Employers

In this report, the term 'employers' is used to refer to individuals in leadership roles that include hiring responsibilities within a creative tech company. Most participants in this study worked in indie studios, with many self-identifying as both "sector professionals" and "employers".

Equity-seeking / deserving: -seeking

The terms 'equity-seeking' and 'equity-deserving' are used in this report to refer to a broad diversity of communities and intersectional identities that have self-identified as experiencing barriers to sector access based on those identities. The term 'equity-seeking' acknowledges that there are multiple points of privilege and/or marginalization that can affect someone's life and livelihood; it reflects systemic, on-going processes – not a permanent state or social location.

Freelancer

A creative professional who is hired on a contract / per project basis that is not exclusive to a particular studio or company.

Funding

In this report, funding refers to financing that creative professionals can apply for. These funds are administered by a variety of decision-makers representing different funding sources (e.g., industrial, arts). Participants did not distinguish between types of funding in their responses.

Indie Studio

Independent studios that tend to have fewer than 20 employees.

Non-profit organization

Organizations that provide services to support individuals and studios in the creative tech sector (e.g., Hand Eye Society).

Sector professionals

Individuals working in the creative tech sector.

Executive Summary



The Creative Technologies sector in Canada is in an accelerated phase of rapid growth. Ontario is home to roughly half of Canada's tech workforce, and is a primary 'hub' for Canadian creative tech. The creative tech landscape in Ontario is composed of mostly small, often independent studios (>80%) and some larger tech companies¹, representing the video game and interactive media segments. Toronto is one of three major creative tech centres in Ontario, with substantial growth expected over the next several years. To keep pace with this period of accelerated growth, studios are facing a shortage of skilled professionals that is leading them to look outside Canada to meet talent demands. There is growing awareness that a lack of diversity and representation in the Creative Technologies sector means significant talent remains untapped, in terms of both the number and quality of skilled professionals. Indeed, it is now well established that a diverse, inclusive workforce leads to increased creativity, faster problem solving, better products that appeal to more audiences, and healthier company culture – all of which have a net positive effect on profits.

1 Interactive Ontario. (2019). Measuring Success: The Impact of the Interactive Digital Media Sector in Ontario. Nordicity.

Several sector studies have been undertaken in recent years, which have been primarily economic in focus. These studies have prioritized the perspectives of employers, with larger creative technologies companies enjoying a greater share of voice. Missing from the current research landscape are the perspectives of current and aspiring professionals – the workers operating in what is anecdotally recognized as a complex and challenging sector to navigate.

This study addresses the gap in existing research by presenting the perspectives of creative technology professionals currently working in the sector and those seeking to 'break in'. This study explores the career and development pathways, employment strategies, and barriers to access experienced by professionals of all identities navigating Toronto's Creative Technologies sector. These experiences are further examined through a diversity, equity, and inclusion lens, to consider how current attitudes and practices may shape the experiences of professionals from underrepresented and equity-deserving communities.

KEY TAKEAWAYS

Sector fragmentation complicates navigation and access

- Relationships and referrals are the primary currency of access, and structural barriers limit access to relationships and social capital for equity-seeking sector professionals.
- COVID-19 made creative communities harder to find, but virtual opportunities to connect made participation more accessible for some sector professionals.

The needs of indie studios differ markedly from larger studios

 Professionals working in small studios (which comprise most creative tech workers in Ontario) do not believe that existing supports meet their needs; that sector decision-makers prioritize continuous growth, while they are concerned with sustainability. Participants, most of whom work in small studios, reported that funds they are aware of seem to support large studios while threatening the sustainability of small studios, due to a perceived focus on growth and profitability versus sustainability.

Formal educational pathways are disconnected from the current market/workforce

- Self-development is an expectation and often more useful than formal education, which participants feel lack practical expertise. Mid-career development is missing from current offerings.
- Lack of workforce continuity planning post-program inhibits job acquisition.
- Lack of training / resources to support business skills undermine sustainability.
- Notions about 'credibility' (i.e., evaluation of a person's talent/level of capability) differ significantly between sector gatekeepers and the Creative Technologies workforce.

Diversity, equity and inclusion efforts are preliminary, and must centre the experiences of equitydeserving professionals

- Narratives about a talent meritocracy work against equity and inclusion.
- Discrimination is prominent in large tech companies.
- Intense competition creates divisiveness and distrust, with equity-seeking sector professionals being the most negatively impacted.
- Underrepresented sector professionals feel there is a significant lack of sector-level support, and that sector- efforts do not reflect what really works.

CALLS TO ACTION

Commit to funding practices that support small studios and build sustainability

- Create funds / grants tailored to the needs of indie and other small studios to support organizational stability.
- Revise funding criteria to increase access to funding earlier / qualifying with a broader range of experiences.
- Offer mentorship from mentors with indie/small studio experience to support business sustainability as part of funding.

Identify opportunities for sector professionals and decision-makers to collaborate toward shared goals that promote access

• Create regular opportunities for sector professionals and decision-makers to collaborate and identify/leverage points of connection.

Bridge the gap between training/education and the workforce

- Promote existing and continue to develop practical, 'how to' sector navigation as part of education/ development programs, incorporating a variety of pathways to continued skill development and employment (e.g., how to freelance, how to start a studio, etc.), and current tools for networking and getting work (e.g., social media).
- Bring employers into workshop and degree settings to ensure the currency and relevance of course content, and to expose developing talent to potential employers (for example, creating showcase events, inviting employers to be guest instructors).
- Explore new career models that incorporate alternative pathways to skill development & employment.



Develop and implement diversity, equity and inclusion plans & supporting tools

- Develop and implement practical diversity, equity and inclusion plans at the company and organizational level.
- Commit to consistent follow up and accountability measures to ensure actions are sustained.
- Create an Inclusive Practices toolkit for employers to help employers examine current practices and ways of working, and make changes to better support equity-deserving professionals.

Commit to regular, equitable data collection

- Establish standardized, intersectional workforce measures to gain a more accurate view of the sector's workforce.
- Commit to sector research that explores the differential needs and experiences of equity-deserving communities (independently of one another).

1 Overview

The Creative Technologies sector in Canada is in an accelerated phase of rapid growth. Ontario is home to roughly half of Canada's tech workforce, and is a primary 'hub' for Canadian creative tech. The creative tech landscape in Ontario is composed of mostly small, often independent studios (>80%) and some larger tech companies², representing the video game and interactive media segments. Toronto is one of three major creative tech centres in Ontario, with substantial growth expected over the next several years.

To keep pace with this period of accelerated growth, studios are facing a shortage of skilled professionals that is leading them to look outside Canada to meet talent demands. There is growing awareness that a lack of diversity and representation in the Creative Technologies sector means significant talent remains untapped, in terms of both the number and quality of skilled professionals. Indeed, it is now well established that a diverse, inclusive workforce leads to increased creativity, faster problem solving, better products that appeal to more audiences, and healthier company culture – all of which have a net positive effect on profits.

Several sector studies have been undertaken in recent years, which have been largely economic in focus. These studies have prioritized the perspectives of employers, with larger creative technologies companies enjoying a larger share of voice. Missing from the current research landscape are the perspectives of current and aspiring professionals – the workers operating in what is anecdotally recognized as a complex and challenging sector to navigate.

This study addresses the gap in existing research by highlighting the experiences of current and aspiring professionals. It is an exploration of the



career and development pathways, employment strategies, and barriers to access experienced by professionals of all identities navigating Toronto's Creative Technologies sector.

RESEARCH QUESTIONS

- What networks, institutions,
- organizations, schools, and programs currently support professionals in or seeking to enter Toronto's Creative Technologies Sector?
- How do current Creative Technologies
 professionals navigate access and build careers in Toronto's Creative Technologies sector?
- What barriers/challenges are faced by sector professionals when building careers in Toronto's Creative Technologies sector?
- 4 What strategies help people increase access, acquire skills, and build careers in Toronto's Creative Technologies sector?

² Interactive Ontario. (2019). Measuring Success: The Impact of the Interactive Digital Media Sector in Ontario. Nordicity.

2 Research Approach



The research began with a review of the current sector landscape, including existing research on the creative technology sector.

This context was followed by two complementary phases:

- (1) An Online Sector Survey, and
- (2) Qualitative interviews and focus groups.

A total of **179** participants responded to the online survey and **40** participated in the follow up interviews.

SECTOR SURVEY

The study employed established social research survey methods to collect input from sector professionals across roles, and at every career stage to share their understanding, perspectives, and experiences of social capital in the sector.

The survey was distributed through direct email to POV's extensive professional, participant, and alumni networks, by sector organizations and partner associations to their memberships by email and newsletter, by some educational institutions by list-serv email, film festivals, and community programs; and by posting in popular Facebook groups that act as job resources for the sector.

QUALITATIVE INTERVIEWS

Sector interviews made it possible to cover a range of topics beyond what possible to cover in surveys, providing depth and context to the survey-based data. These interviews were opportunities to explore findings and themes from the survey data – to examine the 'why' and 'how' behind the perspectives shared. Interview participants were drawn from participants who volunteered for follow up during the sector survey, key contacts of POV and the research team, and sector professionals referred to by study participants.

3 Research Context & Limitations

COMPETITION & COMMUNITY DISTRUST

Intense competition within the sector has decayed trust. Many sector professionals who were invited to participate in this study declined, and others expressed initial hesitance, citing past experiences where similar invitations to participate in surveys were ultimately used by larger companies to identify and poach talent. Researchers conducted several "off the record" conversations (these participants gave researchers permission to disclose the occurrence of this conversations but not their contents) that explained how this distrust was likely to undermine participation in this study.

Additionally, this sector does not have a history of data collection, which meant that many potential participants did not see how this could be helpful to them. The industry is extremely busy, competitive, and stressful – asking sector professionals to take time away from deadlines and creative work is a big ask without context and evidence of a return on the personal investment of time.



PARTICIPANT REPRESENTATION

Data collection is extremely limited in the Creative Technologies sector, and the Census uses different categories to describe sector and employment than are used by the sector at large. Accordingly, it is difficult to establish a benchmark against which to evaluate the representativeness of this study's sample population.

Independent of these constraints, the sample population of this study does seem to represent an overrepresentation on three demographic variables:

Location. The scope of this study was situated primarily in Ontario and Toronto. Accordingly, most participants in this study reported working in Ontario.

Language. This study was conducted primarily in English, and therefore represents the experiences of the Anglophone community within Toronto's Creative Technologies sector. Research dedicated to understanding the experiences of Francophone creators, conducted exclusively in French, is encouraged to reflect the sector dynamics in Québec.

Gender. 52.01% of respondents identified as women (cisgender) . According to the industry data available, this appears to be an overrepresentation. However, due to the incompleteness of current data sets, it is difficult to quantify the extent of this overrepresentation.

Additionally, while this study engaged participants representing a wide variety of identities, the focus on Toronto and Ontario means that communities of sector professionals who work and reside outside of these areas might be underrepresented in the data. In particular, this study had very few participants who identified as Indigenous, despite a growing



community of Indigenous sector professionals working in the sector. Accordingly, this report is careful in its analysis of identity variables, focusing instead on broader groupings of participants according to shared experiences. Further research that engages directly with specific communities of sector professionals, led by researchers from those communities, is strongly encouraged.

REPORTING

Participants included members from a wide range of communities, reflecting a broad set of identities. The scope of this research, combined with the current workforce composition of the Creative Technologies sector, means that not all communities had sufficient participation to be differentiated in this reporting while maintaining anonymity.

Participants' responses tended to cluster according to equity positionality. To show the magnitude

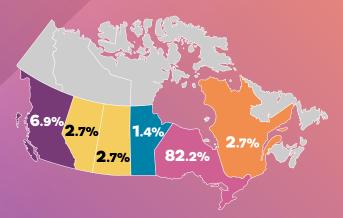
of this discrepancy (i.e., between equity-seeking sector professionals and non-equity seeking sector professionals), this research segments the data according to participants' identification as members of communities that have experienced marginalization.

When differences reported by participants with specific identities and intersectionalities were statistically significant, the experiences of these participants are presented separately in the report.

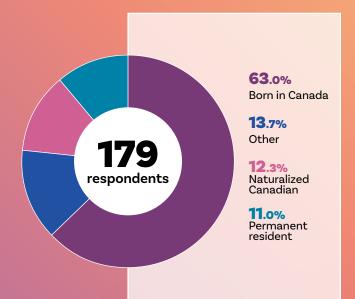
Similarities in the experiences reported by Black, People of Colour, Indigenous, 2SLGBTIQA+ and People with disabilities in this study, does not suggest these experiences are 'the same' across all settings. It is expected experiences of sector access and navigation will differ within and among these communities in ways that were not surfaced through this study. Focused recruitment and exploration that goes beyond the scope of this research would build upon the preliminary findings outlined in this report, to support the development of specific interventions that meet the needs of each community.

4 Study Participants

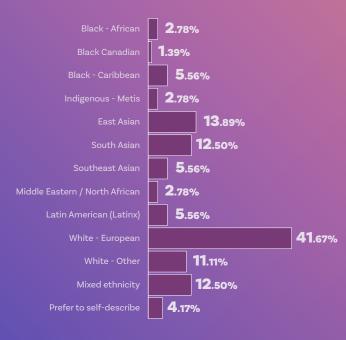
LOCATION



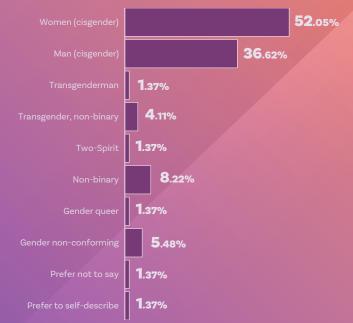
CITIZENSHIP

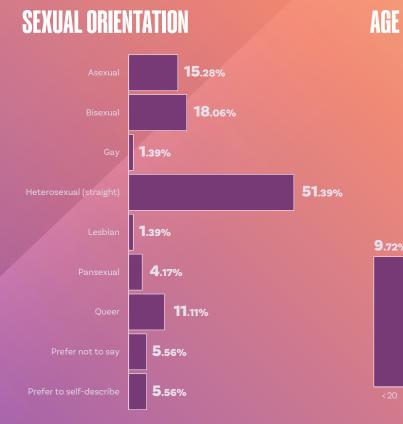


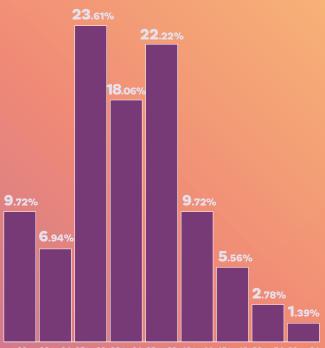
ETHNIC IDENTITY



GENDER





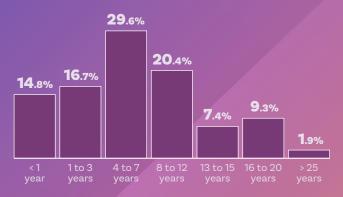


DISABILITY V prefer not to say 5.6% V es 20.8% 80.0% A learning disability 60.0% A mental health disorder 5.3.% Neurodiversity 6.7% A sensory impairment 6.7% A sensory impairment

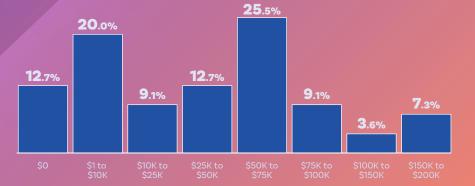
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5 Work Experiences

YEARS IN THE SECTOR



INCOME FROM WORK IN THE SECTOR



respondents

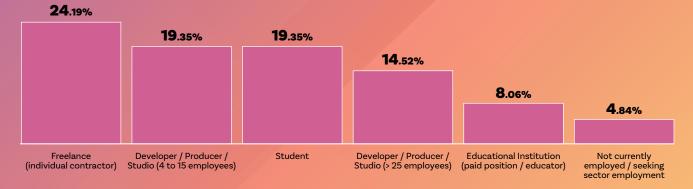
CAREER STAGE

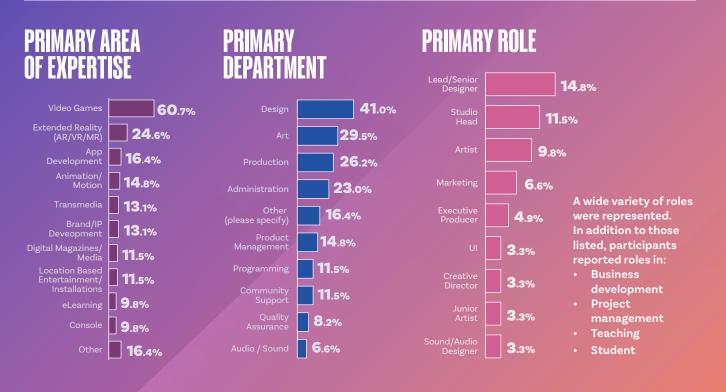


Breaking in

41% of respondents *also* reported that they are currently working in other sectors at least some of the time.

CURRENT PLACE OF OCCUPATION





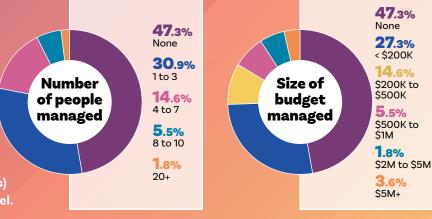
TYPICAL PROJECT BUDGET



LEADERSHIP & Decision-making

55.7% of participants reported being the lead of their department or company (including companies with a single employee).

57.4% reported being decision-makers (even if they were not department leads) and 42.6% said they could hire personnel.



6 Career Pathways & Access

SECTOR FRAGMENTATION COMPLICATES NAVIGATION AND ACCESS

The Creative Technologies sector is extremely fragmented, distributed, and hidden. Not only was this a common narrative from participants, it also materially impacted researchers: finding and gaining access to sector professionals was challenging.

Unlike other sectors, the Creative Technologies sector is absent of unions, guilds, or other employmentsupporting gatekeepers that often provide infrastructure to support workforce navigation and development. While membership-driven associations, such as Interactive Ontario, and community-specific groups, such as Gamma Space and Dames Making Games (DMG), perform some of the work to gather and centralize useful information and resources, participants consistently reported a lack of overall visibility into into how the sector is best navigated.

A major factor contributing to the lack of sector visibility is the breadth of 'creative technology' as a category and differing perspectives regarding what is and is not included under that umbrella. This challenge is not limited to the creative technologies sector, but inherent to digital media overall as an industry of rapid and continuous evolution.

Adding to this confusion is the inconsistency of information (data, organizations, etc.) available for each subset of the broader sector. For example, gaming seems to be the most established in terms of pathways to education, the presence of midand large-sized employers, and publicly searchable information and resources (e.g., via Interactive Ontario, project-based websites and marketing). However, it cannot be overstated that the information remains very limited and disconnected – the video game sector is obscured by a loose workforce infrastructure, lack of workforce and individual-level data, and evolving, project-driven organizational structures. Other areas of creative tech, such as immersive, or VR/ AR, remain very murky. In other cases, overlap with other sectors, like VFX with film and television, makes sourcing data (about employment, jobs, workers) and information even more difficult and unreliable.

Different roles have different pathways to access and indicators of credibility

Embedded in the complexity of a fragmented sector, is the splintering of pathways to access dictated by the roles within each subsector. Participants shared very different expectations, codes of conduct, and practices that characterized the roles they had experience in, highlighting the nuances of sector navigation. For example, in video games might be understood as two main paths -art/design, and development/programming. Although both routes might include relevant programs delivered through educational institutions, place considerable weight on passion for the work and deep understanding of gaming culture, the sector professionals drawn to each pathway, the skill sets required, the ways they access work, and how they assemble/collaborate with others differs significantly for each route.

Understanding how the sector functions according to each subsector and role requires considerable sector savvy and social/cultural capital to gain access to this knowledge. This, along with the specificity of expectations and rules of engagement that characterize these paths encourage specialization to enable a creative to develop the deep knowledge of the sector and relevant relationships required to access sustainable opportunities. At the same time, however, participants highlighted the ways this required specialization limits mobility, as it discourages the development of transferrable knowledge and skills.

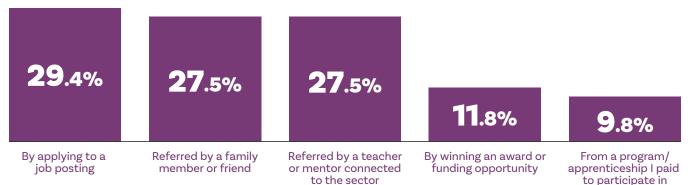
THE SECTOR IS COMMUNITY-BASED AND COMMUNITY-DRIVEN

Loose infrastructure, ambiguity about gatekeepers, obscured pathways to entry, and limited publicly available information is both reflective of the community-based nature of the sector and reinforcing of its structure / form of governance. There is a significant cultural aspect to each subset within the Creative Technologies sector; each subsector is characterized by particular forms of cultural and social capital anchored in a deep passion for and understanding of that genre of work. For many, lifestyle, identity, and passion coalesce to signal 'fit' and belonging (e.g., being a 'gamer'). Importantly, the *authenticity* of this identity is critical; participants were clear that credibility was established not only through skill, but through the knowledge, understanding, and passion that many have accumulated over a lifetime of involvement in the sector.

The importance of authentic passion and credibility cannot be understated; 'outsiders' are often perceived (at least at first) as untrustworthy, and participants described considerable hesitance to bringing 'unknowns' into the tight social and creative groups many reported being part of.

Relationships and referrals are the primary currency of access

Referrals and word of mouth was the primary means of accessing a first job reported by participants.



Although some publicly-posted opportunities are available, for example, AAA studios and some midsize organizations might publish opportunities on their company websites or through job boards, employee referrals tend to carry more weight and influence on hiring practices.

For smaller studios and indies, posting in online social spaces like Twitter and Discord was common. While technically in the public domain, access still requires job seekers to know what to search and where, who to follow, and what employers are looking for when applying to these opportunities.

 For example, it is typical for studios to ask sector professionals who are interested in a posted job to post their portfolios directly in the Twitter thread, or to direct message (DM) the job poster directly. In the case of Discord, many Discord communities require individuals to apply and be accepted by the moderators before they can view and post in discussion threads.

Unsurprisingly, participants highlighted that these opportunities are most available to individuals who are already connected (at least parasocially) to the people and organizations looking to hire.

Training, education, and group membership can provide access to relationships

Approximately one third of participants found that membership in sector groups can provide important opportunities to build relationships and gain access to otherwise hidden information. Indeed, 34.1% of participants reported that being part of a creative collective, and 27.5% reported that participating in mentorship were the most useful strategies for gaining access to work and sector mobility.

Although 46.7% of participants reported not being members of an industry-led group, 28.9% reported being members of Interactive Ontario, 15.6% reported being part of a community of practice, and another 15.6% reported being in a mentoring relationship.

- For 32.6% of these participants, access to people and relationships was a primary motivation for joining the group, followed by a desire to access sector knowledge (30.4%) and access to training, development, or learning opportunities (26.1%).
- Although some of these groups proposed that being members would provide sector credibility, this was not a factor for most participants. Only 17.4% of participants stated that being members of a group helps build credibility or makes them more desirable to sector gatekeepers like employers and funders.

Interestingly, group membership was viewed differently by equity-seeking and non-equity-seeking participants.

- Few equity-seeking participants reported being part of industry-led organizations like Interactive Ontario (10%), while 57.6% of non-equity-seeking participants were part of Interactive Ontario.
- In contrast, creative communities of practice were much more common among equity-seeking participants (40.7%) than non-equity-seeking participants (9.1%).

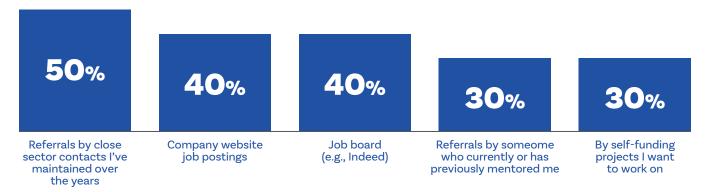
Participants who had completed degree or diploma programs, or had participated in other formal training (e.g., participating in a lab) cited these as opportunity to build credibility and relationships through shared project work. Again, there were notable differences in the types of relationships gained by equityseeking and non-equity-seeking participants:

- Equity-seeking participants reported fostering relationships with peers with whom they could continue to work on projects post-graduation.
- Non-equity-seeking participants reported relationships with instructors and facilitators that generated referrals for their first job or other work opportunities.

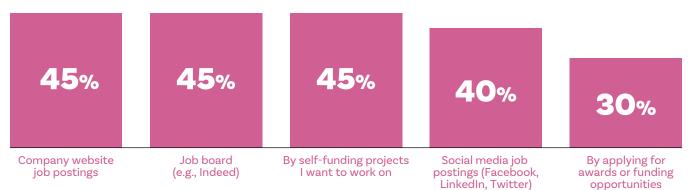
Structural barriers and social capital limit access for equity-seeking sector professionals

Significant differences emerged in the strategies that participants reported using to gain their initial sector entry (to "break in").

80% of non-equity-seeking professionals reported using a referral to get their first job.



In contrast, 100% of equity-seeking professionals reported approaches that **did not involve referrals** to gain their first job.



Similar patterns were observed in the ways participants find work now (i.e., how they "stay in" the sector). Non-equity-seeking professionals reported relying almost entirely on relationships and referrals, while equity-seeking professionals detailed strategies that involved a wider variety of activities and resources that did not depend on relationships.

Looking at the main barriers to gaining employment faced by equity-seeking and nonequity seeking participants provided insight into these different job-seeking strategies.

Non-equity-seeking professionals acknowledged facing few barriers overall. The most reported barriers faced by this group included:

- **44.4%** reported being blocked to advancement opportunities.
- **33%** wanted but had difficulty finding a mentor.
- **30%** acknowledged feeling unsure about how to navigate the sector to access opportunities.
- **18%** reported having to work another job to pay the bills while also working on a project.
- **10%** expressed difficulty accessing the right people / decision-makers / building sector relationships.

Equity-seeking professionals were more likely to share challenges that were indicative of structural barriers to access, including:

• **58.9%** expressed uncertainty about how to navigate the sector.

- **53.5%** reported always having difficulty accessing financing/funding and other resources (e.g., equipment).
- **46.2%** reported working another job at the same time to pay the bills.
- **31%** expressed difficulty accessing the right people / decision-makers / building sector relationships.
- **23.1%** reported difficulty building credibility.

Considering these findings alongside the composition of the Creative Technologies workforce In Ontario underscores how equityseeking professionals are multiply barriered:

- 66% of Ontario's workforce is comprised of small studios³ (fewer than 5 people). Participants working in these studios describe lean teams assembled according to projects, moving through cycles of development, production and seeking funding to make the next product and keep the studio alive.
- These studios tend to be flat organizations with roles contingent on the project and funding, and given the uncertainty of future funding, studios often remain lean to survive. The leanness of these teams, and the high stakes environment, means that project teams that work together successfully tend to remain together – leaving few opportunities to bring on new sector professionals (and therefore fewer opportunities for equity-seeking professionals to join these studios).
- Another option is to assemble a small team and undertake a project to create one's own job opportunities. This is where the structural barriers

³ Ontario's Next Gen Industry: Addressing the Labour Demand and Growth in the Creative Technology Sector (2022)

faced by equity-deserving participants were particularly impactful: **53.5%** of equity-seeking participants named the lack of access to financing or funding as a primary barrier they always or often face. In other words, for at least half of equityseeking participants, the route of starting their own small studio is not an option.

A third option is to gain access to work at a AAA studio. Again, lack of sector relationships and social capital significantly limited access for equityseeking participants. Moreover, participants shared that the work environment at many AAA studios are hostile and/or threatening for them. Indeed, many remarked on the trend of established, nonequity-seeking professionals leaving these studios and starting their own teams due to inhospitable workplaces and organizational cultures.



COVID-19 made creative communities more hidden, but more accessible for some ector professionals

The COVID-19 pandemic significantly reshaped the navigation of the Creative Technologies sector.

Shifting entirely online opened new opportunities to bridge geographical barriers through online communities like Discord and normalized having a distributed workforce. At the same time, many of these online communities are difficult to find, and collaborating as a hybrid and distributed workplace introduced new challenges:

- How do you onboard new people and bring them into the company culture and expectations?
- How do you transmit the unspoken rules of company and the industry through remote work?

Participants explained the importance of in-person spaces and events that were integral to building community, networking, and skill development that were all but eliminated as a result of the pandemic:

- How do you transition game jams and other critical creative / community events (e.g., gamefocused events, launch events, socials, workshops, networking sessions) online?
- How do you connect with similar others without these events?

Now, three years after the initial lockdowns, participants reported that many of these events have not returned – either in person, or in a modified online version – complicating their navigation of the sector.

EXISTING SUPPORTS MAY NOT Reflect the needs of all sector Professionals working in the sector

An overarching theme throughout both the survey responses and the follow up interviews, was a considerable disconnect between the supports offered by sector gatekeepers (e.g., funders) and other industry decision-makers (e.g., associations). Although most organizations in Ontario are small, independent studios (66% have 4 employees or fewer, while only 5-7% of studios have 100+ employee), participants detailed funding practices, financial incentives, and development programs that favour the needs, experiences, and structure of large, AAA studios.

The sector prioritizes growth, while sector professionals seek sustainability

Qualitative consultations with decision-makers from these governing organizations revealed distinct

differences in the ways they described the needs of Ontario's Creative Technologies workforce, and the priorities shared by participants during the qualitative interviews in this study. A major difference was in the way each defined 'success':

Sector-led funding and programming is focused on growth – growing the economy, creating jobs. In contrast, participants explained that 'growth' is not the priority – the focus of many small studios is to develop a product and secure funding for the next project (e.g., the next game). In addition to the 41% of participants who reported doing work *outside the sector* in parallel to their work in creative technologies, many of the studios represented by this research reported doing contract work alongside their own projects. This was particularly true in video games, where studios reported doing work that is adjacent to games, such as software development, that could "pay the bills" while they seek funding or try to drive sufficient revenue to develop their next game.

Participants underscored the unsustainability of this model: having a side job and doing contract work might get the product out, but it does not build a sustainable business for the studio. Under these conditions, workforce development programs and funding that focus on 'growth' are not relevant.

"For a lot of these funds, you have to commit to growth. We don't want to grow. Growth brings more risk. We want to work on cool projects, with good people. That's why most of us got into this."

Studios are motivated to stay small

In addition to the conflict between the sector's push for growth, and studios' need for sustainability, participants detailed a desire to keep their studios small. Motivations to stay small included:

• The challenges they face as a small studio are amplified as the studio grows (i.e., more complex budgets, larger teams). Especially since most



participants identified a lack of training/support for building a sustainable business (i.e., business skills), staying small keeps things manageable, and keeps the team focused on the main priority – developing exciting games and products.

- Many participants shared the ways they have been harmed by being part of large studios / teams in the industry – harassment, lack of diversity, exploitation both in terms of the work required (working significant overtime, lack of compensation) and for their identities (e.g., being the 'diverse person', larger studios using their presence to gain public media attention and social capital). Participants explained that smaller teams and co-op models are more protective and therefore more appealing.
- Smaller teams also allow for more revenue-sharing, which ensures that people are compensated for their expertise and time – this makes it safer to invest themselves in their work without being taken advantage of. It also keeps them closer to the intellectual property they are involved in developing.
- Additionally, participants cited a lack of examples of successful mid-size organizations they would like to replicate, which further reinforced their preference for staying small.

Notions about 'credibility' differ significantly between sector gatekeepers and the Creative Technologies workforce

Researchers discovered a considerable discrepancy between the way sector gatekeepers describe credibility and 'pedigree', and participants' experiences of the way employers and funders evaluate a creative's background and experience.

- Sector decision-makers emphasized the 'pedigree' that comes from completing degrees and certificates from certain educational institutions.
- In contrast, participants clarified that not only is formal education not part of pedigree – educational institutions are not a factor at all. Instead, participants explained that both funders and employers look for past (or current) employment at AAA studios as a measure of pedigree.

For sector professionals in the sector, a major benefit of education are the peer relationships they gained, and their experiences working on projects as a team. Many participants reported creating their studios with peers they knew well from school, with whom they were already used to collaborating. But this was not a factor in terms of how they were evaluated by employers or when applying for funding.

While these distinctions might seem small, there is a recurring gap between what sector decision-makers believe and what sector professionals report. These gaps were apparent to participants, leading them to question 'whom' funders (e.g., in the structuring of funds) and sector associations (e.g., in the types of programs available) cared most about supporting (participants believe it's the large studios).

FUNDING SUPPORTS LARGE Studios while threatening the Sustainability of small studios

Accessing funding was the *least reliable* means of gaining work opportunities reported by participants, with only 23.8% including applying to funding or awards/grants as a way they currently obtain work. Participants reported that gaining support from major funders was so difficult that they were much more likely to report self-funding their projects (which is a much higher-risk approach) to create opportunities than to spend the time, "filling out long applications for things there's no way we're going to get anyway".

Qualitative interviews clarified that the funding challenges faced by participants are less a reflection of their capacity / talent, and more of a reflection of the sector's prioritization of large studios with their focus on 'growth'. Participants detailed the ways current funding structures neglect business sustainability needs and create *systemic barriers* for small studios, which again, comprise most studios in Ontario:

- Many funds are recoupable loans that see the funder taking a stake in the IP produced for up to 7 years beyond the repayment of the loan. Not only does this put studios and creators at a disadvantage in terms of ownership over what they produce, but this structure hinges on the product also achieving a certain level of financial success for the studio to make money while repaying the funder. Moreover, small studios are unlikely to have the marketing skills or budget required to effectively promote and distribute the product, putting them at a further disadvantage.
- Funding eligibility often includes minimum levels of experience (years of experience, producer credits, percentage of budget spent on similar projects in the last two years, etc.) that reflect multiple, financially successful years working in the sector (even for 'new companies'). These requirements completely exclude creators who have not previously received funding, have not worked at large/AAA studios in the past, and/or who are newer to the sector overall. Participants highlighted that over the longer-term, these conditions continue to restrict access to funding even as sector professionals working in smaller studios gain experience, due to the instability of resources and projects that result from lack of access to funding it is a self-reinforcing cycle.
- Participants also noted that funders tend to privilege a certain pedigree of experience based on the organizations that the applicant has worked for in the past like Ubisoft, Riot, and EBA (notably, history with other large/AAA studios confers a certain pedigree, but educational institutions/ programs do not, according to participants).
 Participants explained that funders are often looking for very specific skill sets and work histories within the team that, in some ways, 'permanently' excludes some studios from applying.
- Funding applications can be long and complicated, and often require studios to include market/ audience analyses / reporting to build a business case for the project. These are resource-intensive efforts that require both budget and expertise most small studios do not have.

In addition to the structural barriers to accessing funding, participants described the often undesirable conditions of working on funded projects – some of which seem antithetical to the passion-driven culture that symbolizes the sector.

- Participants described the trade-off between the stability of full-time work and health and dental care and having the opportunity to work on projects they found most creative and interesting (which participants reported were less consistently funded).
- Participants also described many of these projects as involving long hours, overtime and "crunch time" that make such projects difficult for a variety of reasons, for example:
 - » Participants with disabilities described being confronted by a "too bad, do it anyway" attitude when they reported needing rest or accommodations specific to their disability.
 - » Participants working other jobs, and those with families or other responsibilities reported that the inflexibility they found to be common in large studios consistently placed these responsibilities in conflict.

Consequently, participants disclosed that if/ when they were unable to meet the chronic demands of the environment, they often either left or were exited from the team.

For small studios, current funds require high levels of investment from them, with limited pay-off – the stretching that small, lean teams must do to execute on funded projects often does not provide sufficient investment to sustain the business beyond the project that has been funded. When the project is complete, they are back in the same place of having to secure funding for the next phase.

Alternative supports are being introduced, but are not well known, and have a comparatively small footprint

Alternative funds and wrap-around supports have emerged in recent years, such as the Baby Ghosts (community accelerator is a partnership between Weird Ghosts and Gamma Space providing a grant of \$20,000 and four months of tailored mentorship developed by Weird Ghosts, and the Future Forwards program by Interactive Ontario. These two examples approach the problem of access from two different perspectives:

- The Future Forwards program remains driven by the sector narrative of growth / job creation by reducing the years of experience required to participate and providing "grant education" that involves courses on budgeting, marketing, financing, and pitching.
- In contrast, Weird Ghosts seeks to address the problem of business sustainability – which was a central issue expressed by participants in this study. This program provides studios with operational funding, training, and business mentorship to help studios create a more sustainable business model.

While programs like these are necessary, the size of these funds limits the number of organizations they can support.

• For example: Weird Ghosts and Future Forwards both support 6-9 studios per year, while national and provincial funds can support up to 10 times as many.

Moreover, only a handful of participants in this study were aware of these programs, and many were unsure of how to find other useful offerings.

INTENSE COMPETITION CREATES DIVISIVENESS AND DISTRUST

The competitiveness of the sector was a consistent theme that emerged throughout the research, especially in the qualitative interviews. This competition was not only around access to financial resources, but also *talent*. Nearly every interview, at some point, referred to the growing problem of talent poaching and the ways this practice has sector eroded trust, causing smaller studios to be increasingly self-protective and insular.

Participants indicated that the most concerning poaching occurs when large, US-based organizations (e.g., Google, Meta, etc.) come in and offer huge salary inflations, in some cases wiping out more than 50% of the team in a small or mid-sized studio. Small studios cannot compete with these offers. Additionally, having the opportunity to work on "cool projects" (rather than, for example, updating an existing game) is another draw that is especially relevant given the challenges of securing funding in Ontario. AAA studios can fund innovative, exciting projects more reliably.

This talent poaching is prominent at all levels (management and employee level). Owners of small studios expressed frustration about investing in developing talent only to have that talent lured away and being forced to rebuild the team - sometimes putting the current project or funding at risk.

The risk has become so severe that participants reported some organizations leaving mentoring programs / relationships to avoid being exposed to potential poaching scenarios. This finding is not insignificant: 33% of participants reported wanting or actively seeking a mentor, and 40% reported that lack of access to mentors has been a significant barrier to access for them.

This seems to be another example of how the tension between large and small studios in Ontario undermines workforce development.

The erosion of trust within the sector also impacted the current research. Many participants reported looking at the study with suspicion, with some remarking that they had received similar invitations to participate in surveys that were ultimately used by larger companies to identify potential talent within their organizations and poach them. This made several potential participants decline to participate in the present study (which they expressed by email) or to agree to having conversations "off the record" (these participants gave researchers permission to disclose the occurrence of this conversations but not their contents).

Equity-seeking professionals are most negatively impacted

The systematic barriers created through these counterproductive sector dynamics were reported as particularly impactful for equity-seeking professionals. As organizations become increasingly insular and protective, it becomes even more difficult for equityseeking professionals, who were found to be less likely to have pre-existing sector relationships, to build credibility and 'break in' to smaller studios. Participants also detailed the ways this affects skill development, in terms of limiting access to creative communities and other environments where they might collaborate with others on projects.

In terms of the poaching risks, specifically, participants described how a superficial focus on DEI can lead some larger studios to look at the websites of smaller studios, especially of organizations led by Black, Indigenous, and People of Colour, and use the public information to pursue "diversity hires". This creates a harmful dynamic for those being hired into these larger organizations, because this tokenistic approach to DEI treats them as a checkbox and fails to address the systemic issues within the organization that have contributed to a lack of representation. Moreover, this also undermines the success of Black, Indigenous, and People of Colourled organizations that already face many structural disadvantages (in terms of funding and resource access, networking, and relationships, etc.).

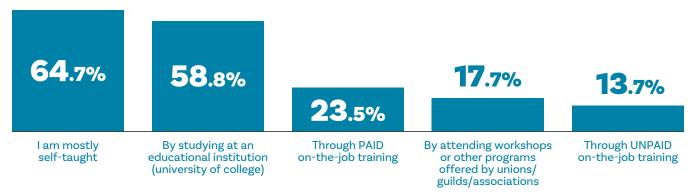
Company culture is increasingly critical for talent retention

Participants shared that the intense competition and distrust that pervades the sector is also reflective of the harmful culture that is present in many large/AAA studios that motivated many of them to either remain small or leave those organizations and start their own studios. Indeed, participants regularly described the environments of AAA studios in Canada and the US as rife with sexism, racism, ableism, and other forms of harassment that made the environments inhospitable.

Participants reported that the culture of a company has gained more importance – they reported wanting to be part of a healthy team and organization, and they want to be working on interesting projects. Increasingly, it has become important to pitch the 'fun' aspects of the work – great people, exciting projects. In a healthy company culture, participants can accommodate more flexibility in the hours required, etc. because their passion and creativity are tapped by the projects and people they are working with.

7 Skill Development

Both formal education (e.g., post-secondary degree) and self-directed learning (e.g., videos, observation / modelling, articles, books) featured prominently in participants' reported routes to skill development.



SELF-DEVELOPMENT IS AN EXPECTATION

Participants emphasized that self-development is an expectation in the sector, regardless of the quality or credibility of formal educational offerings. The dynamic, evolving nature of sector work was understood to inevitably mean that formal educational environments were unlikely to keep up with the pace of change, especially if staffed by faculty who are not actively working outside of academia.

On-going development was also emphasized, which participants reported may focus on honing a particular specialization or developing one's 'niche' to differentiate oneself for future projects (or employers).

More than half of participants reported being almost exclusively self-taught (64.7%). Strategies for selfdevelopment reported by participants included:

- Online videos (80.4%)
- Observing / mimicking others (62.9%)
- Reading articles (54.9%)
- Reading books (47.1%)

Although self-directed development was prevalent across all participants, notable differences between equity-seeking and non-equity seeking participants emerged. Participants who identified as equity-seeking reported being exclusively self-taught (25%) at twice the rate of non-equity seeking participants (12%) and pointed to the expense (in time and financial resources) of formal programs and perceived limitations to their utility (without practical experience, these programs often do not deliver sufficient credibility to secure work upon graduation) as the rationale.

34.1% of participants also reported that being part of a creative collective was integral to their ongoing skill development. These groups tended to assemble according to the area of the industry (e.g., video games) and in some cases, included shared aspects of identity (e.g., 2SLGBTQIA+, ethnicity). Participants described these communities as a type of refuge from a sector that can be both hostile and isolating for sector professionals whose identities diverge from the cisgender male (often white) standard that remains dominant in the sector. These communities and groups were described as providing opportunities to build one's craft (gain feedback, work on shared projects), and through this work, offered alternative, safer working environments anchored on core values of equity and inclusion.

"Some instructors aware, informed and actively attempted to empower equity deserving students and others were bigoted and judgmental buying into the 'talent' myth and openly judgmental toward certain groups."

FORMAL EDUCATION IS USEFUL, BUT INSUFFICIENT

58.8% of participants reported participating in a formal degree or diploma program from an educational institution related to their sector work. A smaller group (14%) also reported pursuing unrelated degrees before finding their way to the creative technologies sector through self-directed learning and development.

Participants who completed a formal education program reported a variety of degree types, including:

- 48.5% Bachelor (BA) or Bachelor of Fine Arts (BFA)
- 30% Diploma/Advanced Diploma (e.g., Animation, VFX)
- 10% Bachelor of Science (BSc) (e.g., Computer Science)
- 10% Bachelor of Design (BDes)
- 10% Certificate program
- 10% Master's Degree

An additional 7% reported taking courses at an educational institution without being part of a degree or certificate program.

Qualitative interviews surfaced a variety of motivations for pursuing a degree, which included:

- Wanting to build the technical skills required to work in the sector.
- To access people/relationships required to gain sector employment.
- To learn about how to navigate the sector.

Overall, participants motivations for pursuing a degree aligned with the primary benefits of the programs, which were reported as:

- Building technical skills (45.7%)
- Gaining access to people/relationships (45.7%)
- Learning from industry experts (41.3%)
- Building a community of peers to collaborate with (28.3%)

Despite this general alignment, participants consistently reflected on the disconnect between formal education and the "real life" experience of the sector. Indeed, the idea that formal education would be a direct conduit to industry access emerged as a common narrative participants heard in high school / growing up, but often failed to deliver.

Practical experience and current expertise are lacking from existing programs

In the survey and throughout the follow up interviews, participants underscored a significant gap in practical application and experiences in formal education programs. This was true even in programs that included placements, expos, and other events intended to bridge the institution-industry gap.

The main gaps reported by participants included:

- Lack of teaching and/or mentorship about working in the sector, both in general and specific to their province of residence (e.g., major focus on AAA studios while most of Ontario studies are indie).
- Limited internship opportunities (paid or unpaid).
 Only 17.4% of participants reported attending a program that offered a placement or internship.
- Lack of recognition in the sector / link to credentials and certifications that the sector cares about (i.e., education provides knowledge/ skills but not credibility).
- More advanced skills (participants reported that most of the learning they had to do to secure a job fell outside of what was covered in their 4-year degrees).

Participants also highlighted the disadvantages of having faculty who no longer work in the sector. Participants explained that this leads to many concepts, software, and ways of working that are essential to working in the sector now, are left out of the curriculum. Importantly, this meant that they could not provide the insight into sector navigation that drove many participants to pursue the degree/certificate in the first place.

Early specialization creates a false impression of linear career progression

The structure and format of degree programs were also misaligned with sector realities. Participants described Canadian programs as encouraging a narrow focus / early specialization on a certain skill set, which is predicated on a linear career path. Participants were clear to say that this is **not** the current sector reality, or the modern ways that people gain access to jobs and other opportunities. Participants hoped to see more creativity in the way educational institutions approach the design of these programs in the future, to foster more "out of the box" thinking about career development and access to better equip students for the real world.

Lack of workforce continuity planning post-program inhibits job acquisition

A significant limitation of training and development programs is the lack of connection and continuity to the workforce. Participants explained that current programs fail to build real networking opportunities and exposure to employers.

- Overall, there a general lack of employer involvement (e.g., to facilitate introductions/ opportunities for sector jobs, bringing hiring managers / talent acquisition specialists to help with job applications), and limited commitments by employers to hire graduates.
- Consequently, participants do not leave these programs with tangible work opportunities or clear guidance on how to navigate and access those opportunities.

This lack of engagement from employers seems to conflict with the refrain of "lack of available talent" that seems prevalent in the sector. Researchers encountered this narrative throughout follow up conversations, especially with sector decisionmakers whose priority is to 'grow the industry'. There appears to be a significant opportunity to bridge talent with employers, and to gain better insight into the source of discrepancies between what employers are looking for and the talent that these programs are developing. This will require engagement and collaboration between employers, educational institutions, and sector organizations offering development programs, which seems to be missing right now.

Mid-career development is missing from current offerings

Mid-career development was also identified as a significant gap in current offerings⁴. Unsurprisingly, the mid-to-senior level of talent was also reported as the most sought-after by sector decision-makers.

Participants identified two challenges that might be contributing to this gap:

- Current programs focus on the bottom of the talent pipeline. These programs build a narrow foundation of skills, beyond which sector professionals are required to self-develop.
- The structure of development programs (including funding targeting new sector professionals) for individuals "breaking in" and "emerging" means that sector professionals can 'age out' of eligibility. This means that individuals who are entering the sector at a later stage, or who have not had the access and experience required to be eligible for more advanced programs/funds are caught in limbo as they are ineligible for support that matches their actual career stage.

"The reliance on Youth Employment Grants makes it almost impossible for people over 30 to enter the industry. This is a structural problem that needs to be addressed. Particularly for disabled people and immigrants, it can take longer in life to be ready to join the industry and current structures exclude these groups."

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⁴ The shortage of mid-career professionals and development opportunities is a challenge that extends beyond the Toronto sector; there is a global shortage that must be addressed.

Within organizations, participants explained that the size of most studios means the organizational structure is flat, and training/development opportunities are limited.

Lack of training / resources to support business skills undermine sustainability

A major disconnect between the training and sector supports available and the needs reported by participants is a focus on business skills. Despite the need for business sustainability expressed by most studios, participants reported that they do not have access to any programming – courses, self-serve resources, workshops, etc. – that address the skills required to build and run a sustainable studio. Participants reported these skills as entirely self-taught, through trial and error.

Relatedly, the same gaps in training/support were identified in terms of building a sustainable career (i.e., if you are not a studio owner / lead).

Priority areas of training/development resource needs identified by participants included.⁵

- How to work as a freelancer
- How to start an indie studio
- How to find networks or networking events
- Business acumen and product knowledge
- Marketing knowledge

THE 'LACK OF TALENT' NARRATIVE NEEDS SPECIFICITY

A common refrain heard throughout the follow up interviews was that there is a major gap in sector talent. This was especially prevalent from employers and sector decision-makers whose priority is industry growth.

To help understand this gap, participants were invited to share the skills that are *most important* for success in the industry, and to reflect on the skills and qualities that *new sector professionals* are most often missing. The skills participants considered the most important for sector success were:

- 50% problem solving
- 44.4% technical skills specific to the area they are entering.
- 44.4% critical thinking skills
- 33.3% strong verbal communication
- 33.3% ability to work independently.

And the skills / qualities that new hires tend to be missing included:

- 38.9% technical skills in the area they are entering.
- 27.8% humility
- 27.8% ability to work independently.
- 27.8% being a self-starter/internally motivated.
- 22.2% knowing how to work as part of a team / how to see their work as part of the whole.

Technical skills in the specific area a person is entering was both among the most important and the most often missing qualities reported by participants. Further examination revealed the source of this gap as a discrepancy between what is taught in schools and the structure of programs (i.e., how things are taught), and the expectations of employers (i.e., the level of practical skills and experiences required, what it takes to succeed in the work environment). This discrepancy further underscores the need for better collaboration and integration between sector decision-makers and sector professionals.

Narratives about a talent meritocracy work against equity and inclusion

Participants shared that many sector members believe the sector is a 'talent meritocracy'; that because these skills are largely self-taught and can be 'shown' (i.e., via portfolios, demos, etc.), a person's outputs provide an objective measure of evaluation. Consequently, many sector members believe that lack of access to the sector is more strongly influenced by a lack of talent.

• For equity-seeking professionals, this narrative ignores the structural barriers to access (equipment, training/ development, relationships, etc.) that materially impact their career development.

5 A review of existing sector offerings points to a gap between participants' perceptions of available programming, and what is currently available. Several of these topics are covered in existing programs offered by Interactive Ontario and other sector decision-makers. Feedback from participants suggests an opportunity to build awareness of these programs and work with sector professionals to ensure they are relevant and accessible.

8 Experiences of Underrepresented Sector Professionals

Throughout this research, the experiences of underrepresented sector professionals revealed a sector designed for a narrow demographic of professionals (men, often white).

- For example, 100% of equity-seeking participants reported an annual income of less than \$100K from sector-related work. In contrast, 20% of non-equity seeking professionals reported earning an income of more than \$100K from the sector.
- 45% of equity-seeking participants reported having to do work in other sectors at the same time, compared to only 27% of non-equity-seeking participants.
- These differences were observed again when it came to projects and budgets: 70% of equityseeking participants reported an average project/ budget size of *less than* \$250K, while only 35% of non-equity seeking reported working on projects funded for less than \$250K.

Anecdotally, participants reported a significant lack of representation of equity-seeking professionals at all levels of the sector. However, limited data collection has prevented the sector from gaining measurable visibility into this challenge.

- In this study, 36.6% of participants reported that a lack of representation in decision-making roles and/ or gatekeeping organizations was a major barrier to access they faced.
- 67.2% of participants reported that they *did not* report to someone from an equity-seeking or underrepresented group.

EXPERIENCES OF DISCRIMINATION Were reported more commonly In large / AAA companies

45% of participants who identified as equityseeking reported that the prevalence of sexism, racism, ableism, and other forms of discrimination is a challenge they face – especially in large / AAA organizations.

 In the follow up interviews, participants clarified that this was much less common in smaller companies. However, given the size of smaller organizations (i.e., having fewer than 5 employees) often means that these studios tend to centre on a common aspect of identity (e.g., ethnicity, gender).

While participants acknowledged that overt discrimination is, therefore, not as present in these studios, structural barriers to access (i.e., lack of relationships) mean that many of these studios lack representation.

"It was just not a thing discussed or talked about at all. It's a very technical and male field where the idea is that it's a meritocracy and so... that's that. A bigger problem is disability access — the ableism of expecting crunch and being like 'yup, that's life' means people with disabilities who should be great can't stick due to burnout."

THERE IS A SIGNIFICANT LACK OF SECTOR-LEVEL SUPPORT FOR UNDERREPRESENTED SECTOR PROFESSIONALS

Overall, participants reported that equity and inclusion are generally not discussed or acknowledged within sector organizations. Participants consistently described a male-dominated sector that promotes a narrative of meritocracy. With this narrative in place, failure to gain access or succeed is blamed on the individual and interpreted as a lack of talent.

These gaps were also reflected at the level of sector gatekeepers and other decision-makers (e.g., funders). Indeed, 30.8% of equity-seeking participants reported that a lack support from industry organizations for equity-deserving professionals as a barrier they always or often face.

- Only 2.2% of participants reported having access to programming that specifically supports underrepresented creators or was part of a DEI initiative.
- When these programs do exist, participants noted the broad strokes used to frame this programming
 – umbrella terms like BIPOC and binary categories of gender – that fail to recognize the implications of intersectionality⁶.

This narrow understanding of DEI has very real implications:

 Disability is missing from the sector's definition of DEI. While programs might include disability among the list of 'underrepresented' communities or sector professionals, the specific issues of access faced by sector professionals with disabilities are not recognized. Paired with the superficial treatment of DEI that larger organizations seem to take (i.e., a numbers-based approach that considers who is present but fails to look at systemic barriers to access, or to attend to the issue of *inclusion*),



sector professionals with disabilities are remain invisible and discounted.

- The use of broad identity categories (e.g., "Indigenous", "women"), and grouping distinct communities together (e.g., "BIPOC") fails to acknowledge the differential experiences of sector professionals who identify in these ways. For example, many Indigenous creators and Indigenousled studios face issues of access due to geography (not being centralized in a major city where the funders are located, lack of access to reliable technology / connectivity). Moreover, Indigenousled companies reported experiencing specific harms as part of training and mentorship programs led by sector decision-makers and were more likely to withdraw from such programs as a result.
- When programming is introduced for specific communities of sector professionals, it is almost always led by community-specific and/or equity-focused organizations. For example:
 - » The Indigenous Screen Office's Digital, Interactive, Immersive Strategy Grant (partnership with Google), the Immersive Incubator Program led (partnership with MIT), and the Immersive/Interactive Producer Fellowship (partnership with NFB).
 - » The Accelerator for Black Creators and Producers in Immersive Media by OYA Black Arts Coalition in partnership with the Canadian Film Centre's Media Lab and Dark Scope.

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⁶ Intersectionality is an analytical framework developed by Kimberlé Crenshaw for understanding how aspects of a person's identities intersect to create different modes of discrimination, access, and privilege.

- » On one hand, this is important, because sector-led programs are often not designed for equity-deserving professionals. On the other, the resources available to community-based organizations are more limited compared to industry organizations, limiting the scope and impact of these programs (i.e., these programs cannot support as many people / organizations).
- Sector initiatives tend to focus on gender, and on a binary definition of gender (men/women). There is no data available on gender discrimination outside of this binary, and no data on the intersections of gender, race, disability, and other aspects of identity. Consequently, the few sector initiatives that participants reported having access to were unlikely to support the 'whole person'. For example, participants remarked that there might be programs to support 'women' in tech, these programs do not consider the differential experiences of Black, Indigenous and Women of Colour in tech (i.e., the intersection of race and gender).



Programs are dominated by (mostly white) men

Participants were asked about their program environments, including the demographic of participants and their instructors. Overall, 50% of participants reported that most of their peers were men, and 34.8% of participants reported most of their peers were white; 47.8% reported that most of their instructors and industry experts were white men.

Given the dominance of a particular demographic in these programs, participants were invited to reflect on how matters of equity and inclusion were (or were not) addressed. Interestingly, responses differed considerably between equity-seeking participants, and non-equity-seeking participants.

- Overall, 50% of participants reported that when program leaders, faculty and/or instructors were not members of an equity-seeking group, issues of equity (race, gender, oppression, etc.) were not directly addressed.
- 34.8% of participants felt their instructors welcomed constructive feedback about how they were showing up in the space, and the needs of participants.
- 32.6% felt their instructors demonstrated awareness of racism and/or oppression in the sector.

Despite the awareness reported, however, only 10.9% of participants were taught by instructors who actively incorporated inclusive practices or could discuss the inclusive practices they employ on their projects.

DEI commitments suggest a superficial understanding of equity and inclusion

Participants with experience in large / AAA studios identified distinctions between diversity, inclusion, and equity:

 Diversity focuses on numbers (who is present in the space), equity focuses on quality (what are they doing in that space), and inclusion focuses on practices (the processes, practices, and ways of working that an organization has in place to ensure people of all identities can be present and engaged as their full selves).

Participants noted that sector commitments tend to focus on *diversity*, in some cases using diverse / diversity (incorrectly) as a noun (i.e., "they are a diverse creative"). Inclusion and, importantly, equity are not part of the DEI narrative.

"People say, 'women have an easier time getting into games because of DEI""

Equity-seeking participants described tokenism and transactional experiences at studios where it was made clear that their identity was a major factor in their hiring. In some cases, this meant that organizations treated them as a checkbox without investing in their development or supporting their career progression. In other cases, they were treated as the 'diverse representative' and expected to be the sole voice representing *all* underrepresented communities on matters of DEI, policy, etc.

Alongside this superficial treatment of DEI, participants reported a general resistance from sector organizations to receiving feedback about their DEI practices.

• If the company had implemented a policy or program, or hired someone from an underrepresented community, this should be considered sufficient.

Participants shared, with dismay, the transactional nature of this understanding; the ways organizations assumed their 'right' or 'entitlement' to the networks, relationships, and resources connected to their equity-seeking employees, and the responsibility they placed on underrepresented sector professionals to build DEI practices.

Sector-led equity efforts do not reflect what really works for underrepresented sector professionals

This research uncovered several points of disconnection between what sector's view of what Toronto's Creative Technologies workforce needs, and what professionals working in this sector report. If the support resources, funding, policies, and programs developed are going to be effective for the majority of the workforce, the needs and perspectives of indie studios and sector professionals must be centred. This is even more crucial for underrepresented professionals, whose experiences are distinct from those of non-equity-seeking professionals in the sector, and at risk of remaining invisible.

The strategies that work reported by equity-seeking professionals include:

- 40.7% being part of a creative collective / community (this can include gam jams, etc.).
- 26.3% equity-focused financing programs (i.e., grants, awards, etc.) designed by and for equity-deserving professionals.
- 20% recommended diversity, equity, and inclusion policies that are led/informed by equity-seeking professionals but situate accountability on the sector/employer.
- 15.8% working with equity-focused sector organizations that offer training and events that connect equity-seeking talent to decision-makers.

Overall, equity-seeking professionals were clear to emphasize the importance of centering their needs and perspectives – not assuming or asking their employers (who are often not equity-seeking) what works or is required. Indeed, several participants noted that this was the first time they had been asked to share their experiences in the sector, or to discuss their views of the sector's current state. Participants were critical of efforts that seem designed to build the reputation of sector decisionmakers without having tangible benefits for the equity-seeking professionals they profess to support.



Opportunities & Considerations



Two major findings weave throughout this research, and shape the opportunities and considerations presented below:

There are important differences between the perceptions and perspectives of sector gatekeepers and other decision-makers (e.g., Interactive Ontario, Ontario Creates, Canada Media Fund) and the lived experiences of professionals working in Ontario's **Creative Technology sector. These** discrepancies can be observed in the way sector decision-makers frame current opportunities in the sector (talent gaps, need for growth and job creation) and the interventions/ supports they prioritize/make available.

The complex, hidden, discrete 2. nature of the sector has led to siloed opinions and supports (e.g., education and training that do not reflect the experiences sector professionals require for relevant skill development, lack of engagement from employers, misaligned beliefs about what builds credibility between the schools, funders, and employers). A major priority to improve access and elevate the workforce must involve demystifying the roles of sector decision-makers, and prioritizing crosssector collaboration and integration.

COMMIT TO FUNDING PRACTICES That support small studios and build sustainability

- Create funds / grants tailored to the needs of indie and other small studios to support organizational stability.
- Revise funding criteria to increase access to funding earlier / qualifying with a broader range of experiences.
- Offer mentorship from mentors with indie/small studio experience to support business sustainability as part of funding.
- Introduce funds / grants to support interns/ work placement in indie studios.
- Create equity-focused financing programs (i.e., grants, awards, etc.) designed **by** and **for** equity-deserving professionals.

IDENTIFY OPPORTUNITIES FOR SECTOR DECISION-MAKERS TO COLLABORATE TOWARD SHARED GOALS THAT PROMOTE ACCESS

- Create regular opportunities for decision-makers to collaborate and identify/leverage points of connection, for example:
 - » Bringing together educational institutions / organizations that deliver training to connect with employers and evolve programs to match the realities of working in the sector.
 - » Aligning the programs offered by industry-led organizations with the criteria and qualities used by funders and employers.
- Work with equity-focused sector organizations that offer training and events that connect equity-seeking talent to decision-makers.

BRIDGE THE GAP BETWEEN TRAINING/ EDUCATION AND THE WORKFORCE

- Promote existing and continue to develop practical, 'how to' sector navigation as part of education/ development programs, incorporating a variety of pathways to continued skill development and employment (e.g., how to freelance, how to start a studio, etc.), and current tools for networking and getting work (e.g., social media).
- Structure program environments to reflect the working environments of many studio types and sizes.
- Bring employers into workshop and degree settings to ensure the currency and relevance of course content, and to expose developing talent to potential employers (for example, creating showcase events, inviting employers to be guest instructors).
- Connect development programs to placements that can lead to paid work.
- Explore new career models that incorporate alternative pathways to skill development & employment.
- Invest in mid-career development.
- Build creative communities and events that foster relationships between various types of sector decision-makers and professionals (e.g., gam jams).



DEVELOP AND IMPLEMENT DIVERSITY, Equity and inclusion plans & Supporting tools

- Develop and implement practical diversity, equity and inclusion plans and policies that are led/ informed by equity-seeking professionals but situate accountability on the sector/employer.
- Commit to consistent follow up and accountability measures to ensure actions are sustained.
- Develop a funded DEI program through which, over a period of 1-2 years, employers (Indie and AAA studios) receive consulting support to look at their current practices (e.g., recruitment, hiring, talent development) and ways of working (i.e., internal processes, how the work gets done) and make changes to better support equity-deserving professionals.
- Develop and make publicly available an Inclusive Practices toolkit for employers.

COMMIT TO REGULAR, EQUITABLE DATA COLLECTION

- Establish standardized workforce measures to gain a more accurate view of the sector's workforce.
- Recognize how the Census and other established forms of data collection can misrepresent underrepresented sector professionals.
- Apply an intersectional lens to diversity, equity, and inclusion.
- Provide regular, transparent reporting on the data and the interventions informed by those data.
- Conduct more sector research that privileges the perspectives of sector professionals, doing a deep-dive to understand the differential needs and experiences of equity-deserving communities (independently of one another).

